

In response to the 2/19/08 Petition and arguments, the Office will address the Applicant's concerns with a more thorough explanation of the cited art. Additionally, to simplify the issues, the Office has chosen what is believed to be the strongest reference, Bowen et al., as the other references are duplicative in teaching. The below Office action will restart the period for response.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 213-243, 246-253, 263-282, 285-299, 303-309 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bowen et al. (USP 4,802,761).

Bowen et al. teach a method and apparatus for analyzing samples by Raman spectroscopy (SERS or SERRS). A substrate contains metal sol particles and is placed in contact with the sample where analytes attaches to the particles. Column 5 teaches Laser and monochromator are tuned in the range of 220-900 nm to create a Plasmon resonance phenomenon that is quantified by a detector. Column 6 line 19 teaches the metals selected for the island include silver and copper which are identical to the claimed metals. Column 6 lines 55-65 teach algorithms are used to compare the spectra to quantitatively/qualitatively identify the analytes. Column 9 lines 33-41 teach use of Raman standards to ensure calibration which has been read on the claimed first structure and first measurement (e.g. this measurement is a blank where the reading is

made in the absence of the analyte). Column 9-10 lines 60-38 respectively teach the analyte is absorbed or associated with the metal sol particles which have been read on the second measurement.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 244-245, 254-262, 300-302, 310-318 and 321-330 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al.

See Bowen et al. *supra*.

Bowen et al. are silent to the specific conditions for the creation of the metal layers.

The court decided In re Boesch (205 USPQ 215) that optimization of a result effective variable is ordinarily within the skill of the art. A result effective variable is one that has well known and expected results. The method selected for binding the metal sol particles would have been a result effective variable having the well known and expected results of attachment of the metal sol particles to the substrate.

It would have been within the skill of the art to modify Bowen et al. and use the claimed methods of metal deposition as optimization of a result effective variable to achieve the well known and expected results of sol metal particle attachment.

Claims 283-284 and 319-320 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al. in view of Shibata et al.

See Bowen et al. *supra*.

Bowen et al. is silent to the use of metal oxides.

Shibata et al. teach the equivalence of metals and metal oxides. Shibata et al. also teach metal oxides are advantageous because they have higher melting points and will degrade less over time.

It would have been within the skill of the art to further modify Bowen et al. in view of Shibata et al. and use metal oxides to gain the above advantages.

The Declarations under 37 CFR 1.132 filed 10/4/07 have been considered but are no longer relevant in light of the application of the new reference Bowen et al. (e.g. the Declarations address the rejections over USP 5,866,433 which is no longer applied as prior art). It is noted that if Applicant were to supply a 1.132 Declaration in the future, factual evidence is preferable to opinion testimony. If the opinion testimony is attempting to make the ultimate legal conclusion, it is not entitled to any weight even though the underlying basis for the opinion may be persuasive. In re Chilowsky, 306 F.2d 908, 134 USPQ 515 (CCPA 1962) (expert opinion that an application meets the requirements of 35 U.S.C. 112 is not entitled to any weight; however, facts supporting a basis for deciding that the specification complies with 35 U.S.C. 112 are entitled to some weight).

Response to Arguments

Applicant's 2/19/08 arguments traversing the finality of the 12/13/07 Office action were convincing. Therefore, the finality of the 12/13/07 rejection has been withdrawn in favor of the above new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A. Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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